

Amendments to the Claims

Please amend the claims to read as follows:

1-22. (Canceled)

23. (New) A method of localizing a substantially water-insoluble drug within a solid tumor in an animal, the method comprising administering a water-soluble prodrug to the animal, wherein the prodrug comprises the drug substituted with a prosthetic group that is cleavable by an enzyme that is present in the extracellular space of the tumor and that is produced naturally by cells of the tumor, whereby cleavage of the prosthetic group from the prodrug yields the substantially water-insoluble drug.

24. (New) The method of claim 23, wherein the enzyme is produced in the extracellular space of the tumor at concentrations higher than in the extracellular space of normal tissues.

25. (New) The method of claim 23, wherein the enzyme is selected from the group consisting of a phosphatase, a cellulase, a deaminase, a decarboxylase, a DNase, an endonuclease, an exonuclease, a glucokinase, a glucosidase, a glutaminase, a glutathionase, a glucuronidase, a hexokinase, an iduronidase, a mannosidase, a nitrophenylphosphatase, a peptidase, a protease, an RNase, and a sulfatase.

26. (New) The method of claim 23, wherein the enzyme is localized specifically on the surfaces of cells of the tumor following administration of the enzyme chemically conjugated to a targeting moiety.

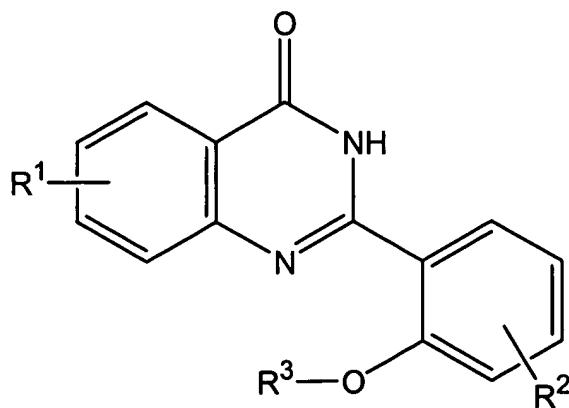
27. (New) The method of claim 26, wherein the targeting moiety is a ligand that binds specifically to a tumor-specific receptor.

28. (New) The method of claim 27, wherein the ligand is selected from the group consisting of an antibody, a peptide, and a hormone.

29. (New) The method of claim 28, wherein the ligand is a peptide and the receptor is specific to the peptide.

30. (New) The method of claim 28, wherein the ligand is a hormone and the receptor is specific to the hormone.
31. (New) The method of claim 26, wherein the targeting moiety is an antibody that binds specifically to a tumor-specific antigen.
32. (New) The method of claim 26, wherein the conjugate is injected by a route selected from the group consisting of intravenously, intra-arterially, subcutaneously, into the lymphatic circulation, intraperitoneally, intrathecally, intratumorally, and intravesically.
33. (New) The method of claim 23, wherein the prodrug is either injected by a route selected from the group consisting of intravenously, intra-arterially, subcutaneously, into the lymphatic circulation, intraperitoneally, intrathecally, intratumorally, and intravesically, or is given orally.
34. (New) The method of claim 23, wherein the drug comprises a radionuclide.
35. (New) The method of claim 34, wherein the radionuclide is selected from the group consisting of a gamma emitting radionuclide, a positron emitting radionuclide, an alpha particle emitting radionuclide, and a beta particle emitting radionuclide.
36. (New) The method of claim 35, wherein the radionuclide is an alpha particle emitting radionuclide selected from the group consisting of astatine-211, bismuth-212, and bismuth-213.
37. (New) The method of claim 36, wherein the beta particle emitting radionuclide emits beta particles whose energies are greater than 1 keV.
38. (New) The method of claim 35, wherein the beta particle emitting radionuclide is iodine-131, copper-67, samarium-153, gold-198, palladium-109, rhenium-186, rhenium-188, dysprosium-165, strontium-89, phosphorous-32, phosphorous-33, or yttrium-90.
39. (New) The method of claim 23, wherein the drug comprises a boron cage.
40. (New) The method of claim 23, wherein the prosthetic group is a phosphate group.

41. (New) The method of claim 23, wherein the prosthetic group is a sulfate group.
42. (New) The method of claim 23, wherein the prosthetic group is linked to the drug by way of an ether linkage.
43. (New) The method of claim 42, wherein the prosthetic group is a glycoside.
44. (New) The method of claim 43, wherein the prosthetic group is a monosaccharide.
45. (New) The method of claim 43, wherein the prosthetic group is a polysaccharide.
46. (New) The method of claim 23, wherein the prosthetic group is linked to the drug by way of an acyl linkage.
47. (New) The method of claim 46, wherein the prosthetic group is an aromatic moiety.
48. (New) The method of claim 46, wherein the prosthetic group is an amino acid moiety.
49. (New) The method of claim 46, wherein the prosthetic group is a polypeptide
50. (New) A method of localizing a substantially water-insoluble drug within a solid tumor in an animal, the method comprising administering a water-soluble prodrug to the animal, wherein the prodrug comprises the drug substituted with a prosthetic group that is cleavable by an enzyme present in the extracellular space of the tumor, whereby cleavage of the prosthetic group from the prodrug yields the substantially water-insoluble drug, wherein the prodrug has the structure



wherein

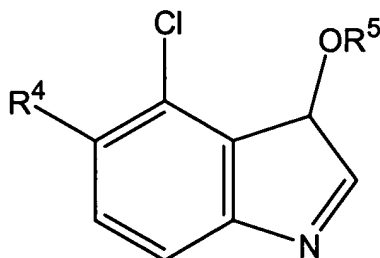
each of R^1 and R^2 is independently selected from the group consisting of a hydrogen radical, a radionuclide, and a boron cage,
at least one of R^1 and R^2 is not a hydrogen radical, and
 R^3 is a prosthetic group that can be cleaved from the prodrug by the enzyme.

51. (New) The method of claim 50, wherein R^1 is a hydrogen radical and R^2 is a radionuclide.

52. (New) The method of claim 50, wherein R^1 is a radionuclide and R^2 is a hydrogen radical.

53. (New) The method of claim 50, wherein R^3 is a phosphate moiety.

54. (New) A method of localizing a substantially water-insoluble drug within a solid tumor in an animal, the method comprising administering a water-soluble prodrug to the animal, wherein the prodrug comprises the drug substituted with a prosthetic group that is cleavable by an enzyme present in the extracellular space of the tumor, whereby cleavage of the prosthetic group from the prodrug yields the substantially water-insoluble drug, wherein the prodrug has the structure



wherein

R^4 is selected from the group consisting of a radionuclide and a boron cage, and
 R^5 is a prosthetic group that can be cleaved from the prodrug by the enzyme.

55. (New) The method of claim 54, wherein R^4 is a radionuclide and R^5 is a beta-D-galactosyl moiety.